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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,054	08/06/2007	David Edsberg	291949US8PCT	4624

22850 7590 03/07/2011

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EXAMINER	
YUEN, KAN	

ART UNIT	PAPER NUMBER
2464	

NOTIFICATION DATE	DELIVERY MODE
03/07/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/584,054	EDSBERG, DAVID	
	Examiner	Art Unit	
	KAN YUEN	2464	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 December 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *8-11,19-22,27-31,39-42 and 50-53* is/are allowed.

6)☒ Claim(s) *1-5,7,12-16,18,23-26,32-36,38,43-47 and 49* is/are rejected.

7)☒ Claim(s) *6,17,37 and 48* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 December 2010* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments, see remark, filed on 12/13/2010, with respect to the rejection(s) of claim(s) 1-53 under 103 Rejections have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Schiff et al. (Pub No.: 2005/0270999).

2. Applicant's arguments, see remark, filed on 12/13/2010, with respect to the 101 Rejection have been fully considered and are persuasive. The 101 rejection of claims 32-42 has been withdrawn.

3. Applicant's arguments, see remark, filed 12/13/2010, with respect to the 112 second Rejection have been fully considered and are persuasive. The 112 second Rejection of claims 2, 5, 8, 19, 24, 27, 33, 36, 39, 44, 47 and 50 has been withdrawn.

Claim Rejections - 35 USC § 103

4. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 2, 4, 12, 13, 15, 23, 24, 32, 33, 35, 43, 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted Prior Art (APA) in view of Schiff et al. (Pub No.: 2005/0270999).

For claim 12, the APA disclosed a hub apparatus configured to acquire a remote node that is not yet acquired by the hub in a satellite communication network, said hub apparatus comprising:

an acquisition unit configured to send a first acquisition command (APA fig. 13; Acquisition Command S1300) to the remote node (fig. 13; Remote Node) that is not yet acquired to acquire the remote node to be added to the network, said first acquisition command configured to instruct the remote node to send an acquisition response (fig. 13; Send Acq Response S1314; see pages 4-5; In conventional method, in order to acquire a remote node, a hub sends an acquisition command (S1300). The acquisition command is received by the remote and the remote sends an acquisition response (S1314)); and

wherein said acquisition unit is further configured to send a second acquisition command before the receiving unit receives a first acquisition response (fig. 13; see pages 4-5; However that response is not received by the hub because the remote did not send the response using the appropriate parameter (e.g., frequency). Accordingly, when the hub listens for the acquisition response (S1302), the hub does not receive the

response. The hub may try again to send a second acquisition command (S1404) which may be received by the remote (S1316);

a receiving unit configured to receive the first acquisition response based on the first acquisition command from the remote node ((fig. 13; see pages 4-5; Finally, the hub sends acquisition command which is received by the remote and the acquisition response (which this time uses the correct parameter values) sent by the remote is received by the hub when it listens for the acquisition response (S1310)).

However, the APA did not explicitly disclose the feature wherein the first acquisition command includes an indication of a first frequency and configured to receive the first acquisition response based on the first acquisition command from the remote node using the first frequency.

Schiff et al. from the same or similar fields of endeavor disclosed the feature wherein the first acquisition command includes an indication of a first frequency and configured to receive the first acquisition response based on the first acquisition command from the remote node using the first frequency (Schiff et al. see paragraphs 42 and 44; The gateway then transmits a control, command, or a reference signal on the forward link to each desired terminal, which acts to instruct the terminals to advance or to retard its transmit parameters. In response to the information or commands provided by the gateway, each terminal adjusts its transmit time and/or frequency, typically, in small increments, in accordance with the instructions received, to maintain the alignment with the receivers in the gateway). Thus, the command information is to

be used by the terminal to alter or adjust its transmission parameters (e.g., timing and/or frequency) transmitted to the gateway.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the acquisition command of the APA and to include the commands with the frequency parameter adjustment as disclosed by Schiff et al. to adjust the transmission frequency parameter of each terminal.

The motivation would be to provide synchronization.

Claims 1, 23, 32 and 43 are rejected similar to claim 12.

Regarding claim 13, Schiff et al. disclosed the feature wherein the second acquisition command identifies one of the remote and another remote for acquisition and includes one of the first frequency and a second frequency (Schiff et al. see paragraphs 42 and 44; The gateway then transmits a command to the identified terminals for transmission parameter adjustment).

Claims 2, 24, 33 and 44 are rejected similar to claim 13.

Regarding claim 15, the APA disclosed the feature wherein the acquisition unit is further configured to send at least a third acquisition command to the plurality of remotes before the receiving unit receives the first response (APA; see pages 4-5; Finally, the hub sends acquisition command (S1308) which is received by the remote before receiving the response S1310).

Claims 4, 35 and 46 are rejected similar to claim 15.

7. Claims 3, 14, 25, 34 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted Prior Art (APA) in view of Schiff et al. (Pub No.: 2005/0270999) as applied to claim 12 above, and further in view of Goldstein et al. (Pub No.: 2005/0085249).

For claim 14, the APA and Schiff et al. did not explicitly disclose a detecting unit configured to detect a symbol offset in the first response; and an offset sending unit configured to sent a symbol offset correction factor to the plurality of remotes, said correction factor used by the remote in a subsequent transmission from the remote to correct the detected symbol offset. Goldstein et al. from the same or similar fields of endeavor disclosed a detecting unit configured to detect a symbol offset in the first response; and an offset sending unit configured to sent a symbol offset correction factor to the plurality of remotes, said correction factor used by the remote in a subsequent transmission from the remote to correct the detected symbol offset (Goldstein et al. see paragraphs 0023-0024). Determining desired parameters of the frequency offsets for carrier groups, which should be transmitted from the hub to user nodes for the corresponding frequency offset correction.

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the network of the APA in view of Schiff et al. to include the features as disclosed by Goldstein et al. The motivation for using the features being that it reduces network interference.

Claims 3, 25, 34 and 45 are rejected similar to claim 14.

8. Claims 5, 16, 36 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted Prior Art (APA) in view of Schiff et al. (Pub No.: 2005/0270999) as applied to claim 12 above, and further in view of Sakoda et al. (Pat No.: 6411662).

For claim 16, the APA disclosed the feature wherein the acquisition unit is further configured to send the second acquisition command within a latency time of sending the first acquisition command (APA; see pages 4-5; since the first command response has not yet been received, the transmission of the second command is still within the latency time of the first command);

However, the APA failed to disclose the feature the latency time is about twice a time elapsed between sending a message and receiving the message at the remote.

Sakoda et al. from the same or similar field of endeavor disclosed the feature wherein the latency time is about twice a time elapsed between sending a message and receiving the message at the remote (Sakoda et al. see column 7, lines 65-67, column 8, lines 1-5). A time alignment operation for the transmission/reception timing can be accomplished by advancing the timing (latency time) by a time A which is twice as long as the one-way propagation delay (A/2), taking into account the fact that the communication between the mobile telephone 3 and the base station 2A is two-way communication consisting of transmission and reception. In other words,

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the network of the APA in view of Schiff et al. to include

the feature as taught by Sakoda et al. The motivation for using the feature being that it synchronizes the timing in the network.

Claims 5, 36 and 47 are rejected similar to claim 16.

9. Claims 7, 18, 26, 38 and 49 rejected under 35 U.S.C. 103(a) as being unpatentable over The Admitted Prior Art (APA) in view of Schiff et al. (Pub No.: 2005/0270999) as applied to claim 12 above, and further in view of Doi et al. (Pub No.: 2003/0139152).

For claim 18, the APA and Schiff et al. both did not explicitly disclose the feature wherein the indication of the first frequency includes a frequency offset that informs the remote to transmit a response based on a predetermined nominal remote transmit frequency and the frequency offset.

Doi et al. from the same or similar fields of endeavor disclosed the feature wherein the indication of the first frequency includes a frequency offset that informs the remote to transmit a response based on a predetermined nominal remote transmit frequency and the frequency offset (Doi et al. see paragraphs 0043-0044). The signal processing unit 50 first detects a timing offset and frequency offset, when a link channel establishment request requesting allocation of a TCH is received from a mobile stations, and then responds to the request by transmitting a link channel allocation (timing offset and frequency offset).

Thus, it would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the network as disclosed by the APA in view of Schiff et

al. to include the feature as disclosed by Doi et al. The motivation for using the feature being that it improves transmission efficiency.

Claims 7, 26, 38 and 49 are rejected similar to claim 18.

Allowable Subject Matter

10. Claims 8-11, 19-22, 27-31, 39-42 and 50-53 are allowed.

11. Claims 6, 17, 37 and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Examiner's Note:

12. Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The Applicant is welcome to request a telephonic interview if the Applicant has any questions or requires any additional information that would further or expedite the prosecution of the application.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kan Yuen/
Examiner, Art Unit 2464

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2464

KY